



## CAPITAL EQUIPMENT



SOPRO COMEG



# CONTENTS

1	COMPANY .....	5
2	VIDEO CAMERAS .....	11
3	LIGHT SOURCES .....	33
4	INSUFFLATORS .....	45
5	FLUID MANAGEMENT .....	53
6	MONITORS .....	61
7	COMMUNICATION SYSTEM .....	67
8	ARCHIVING SYSTEMS .....	71
9	IMAGING SOFTWARE .....	75
10	MEDICAL CARTS .....	79

French manufacturing plant

**La Ciotat - FRANCE**

Surface : 3 200 m<sup>2</sup>



German manufacturing plant

**Tuttlingen - GERMANY**

Surface : 2 600 m<sup>2</sup>

# 1 COMPANY

Company history .....	p6
Products range at a glance.....	p7
Regulatory.....	p8
Research & Development .....	p9
Service & Assistance .....	p9
Representative offices .....	p9

# 1 COMPANY



## SOPRO

**1977**

SOPRO was founded.

**1986**

Introduction of microcameras for endoscopy.

**2001**

SOPRO joins the Acteon Group.

**2003**

Sopro moves into a bigger, brand new building in La Ciotat.

**2004**

Acquisition of Geyser and development of a range of insufflators and pumps.

## COMEG

**1975**

COMEG was founded.

**1977**

Introduction of medical endoscopes.

**1993**

Introduction of autoclavable endoscopes.

**1994**

Introduction of the urology product line.

**2001**

New optical generation of medical endoscopes.



## SOPRO COMEG

**2006**

COMEG joins SOPRO

**2007**

Introduction of a Spine surgery product line

**2009**

Introduction of the SOPRO 397 3CCD Full HD camera

Introduction of the Sopro Medical Software

Introduction of a range of bipolar forceps & scissors

**2010**

Introduction of the Full HD laparoscope

Introduction of HEOS, the hysteroscopic endo operative system

Introduction of UBIPACK, the complete solution for gynecology and ENT

**2011**

Introduction of ULYSS, 4mm autoclavable endoscope with variable direction of view

**2012**

New range of uretero-renoscopes

**2013**

Introduction of a bipolar resectoscopy range

**2014**

Introduction of SYMBIOZ and the SCard

# 1 COMPANY

## PRODUCTS RANGE AT A GLANCE

**SOPRO-COMEG offers a complete range ranking from capital equipment to re-usable, high quality, durable instruments. Whatever your application is: Urology, Laparoscopy, Arthroscopy, Gynecology, Spine, ENT, SOPRO-COMEG will offer you the best solution and fulfill your needs.**



### Capital equipment

SOPRO-COMEG meets the needs of international surgeons and distributors by supplying complete solutions for video endoscopy. Our range includes equipment for both consulting and operating rooms, using latest technologies available in the market. Full HD video cameras, Xenon and LED light sources, insufflators, pumps, shaver, medical grade monitors and visualization/archiving systems. These products have already proven their worldwide reliability and are considered today as a standard in the mini invasive surgery field.

### Laparoscopy

SOPRO-COMEG proposes a complete range of instruments for entry into the peritoneum, the first and most crucial step in successful laparoscopic surgery. A complete range of hand instruments in both monopolar and bipolar electrocautery versions is also available. The full HD 10mm laparoscope will provide you the quality you need for High Definition picture.



### Urology



SOPRO-COMEG, a company with over 25 years experience in the urology field, offers endoscopes with exceptional optical quality and a complement of instruments which will ease even the most demanding urological procedures including: cystoscopy, resectoscopy and urethrotomy. These products are an integral part of recent technological advancements which improve the diagnosis-treatment process and the level of care that urologists can now offer to their patients.

### Gynecology

Gynecology, hysteroscopy, resectoscopy and other procedures are made easier with the SOPRO-COMEG products. Clarity and efficiency are the key words of our gynecology range.



### Arthroscopy



Sharp images, precision in visualization are possible through the use of our range for arthroscopy from 4.0mm telescopes to the small-joint arthroscopic lines.

### Spine

Our spinal endoscopy system allows to treat disc-diseases. All types of hernias can be removed in a minimal invasive interlaminar approach, by means of the endoscopic technique. The technique also qualifies for the effective treatment of chronic back-ailments caused by disc-prolaps or tears. Furthermore, endoscopic treatment of spinal stenosis has increased.



### ENT



Our field of activities also includes all areas of the ENT disciplines, whether it is diagnostics or therapy, practice or clinic. We propose rigid endoscopes and accessories necessary for sinuscopy, otoscopy and laryngoscopy. All our instruments are manufactured with the highest quality materials.

# 1 COMPANY

## REGULATORY

**Our business practices and processes are designed to achieve quality results that exceed the expectations of patients, customers, surgeons. We are dedicated to the delivery of quality healthcare products around the world.**

From the start of development of a new device through manufacturing to the final quality control check before delivery, Quality is built in to all our products, as is our commitment and dedication to our customers throughout the world.

Both plants are certified to the highest international quality standard, ISO 13485 for Design, Manufacturing and Sales. Our products comply with the various regulations established across the world, specifically those required by the Food and Drugs Administration and the European Union.

**SOPRO and SOPRO-COMEG manufactures equipments and endoscopes in accordance with the following directives or standards:**

- Medical device directive 93/42 EEC (M5 2007/47 EEC)
- DIN EN ISO 13485 : 2003 AC:2007 certified : Quality management system
- EN ISO 13485: 2003 AC:2007 certified Quality management system
- EN ISO 13485: 2003 AC:2007 certified Quality management system (issued according to CMDCAS program requirements)
- Series of standards IEC 60601
- Series of standards ISO 8600
- FDA regulations\* (FDA Quality system Regulation 21 CFR Part 820).
- EC attestations issued for all our class II devices..



*\*the newest ones may be 510(k) pending.*



# 1 COMPANY

## RESEARCH & DEVELOPMENT

Innovation being the key to improve health, SOPRO-COMEG invests a significant part of its revenue in R&D and patents filing. Our world-renowned know-how is medical imaging, relying on senior engineers with strong expertise in electronics, software, optics and mechanics.

Also, we in SOPRO-COMEG, have access to the very wide R&D department and connections of our mother company, Acteon group, adding to the previous know-how : ultrasounds, chemical, motors, X-Ray and Cone Beam Computed Tomography systems (CBCT).

This very rare combination of know-how allows us to join the extremely limited group of the companies mastering the design & the manufacturing of the complete endoscopy solution.

## SERVICE & ASSISTANCE

**In both our main plants (La Ciotat and Tuttlingen), our on-site specialists are dedicated to servicing and providing expertises to your SOPRO-COMEG products:**

- Express repair of all our products under warranty
- Free quotation for all repairs out of warranty
- Qualified repair with original spare parts
- Streamline endoscope exchange program)
- Technical training

• **SOPRO-COMEG in France**  
(Equipment)  
ZAC Athelia 4  
Avenue des Genévriers  
13705 La Ciotat cedex  
Tel +33(0)442 98 01 09  
cs@sopro-comeg.com

• **SOPRO-COMEG GmbH**  
(Endoscopes and accessories)  
Serviceabteilung  
Dornierstrasse 55  
78532 Tuttlingen - Germany  
Tel +49 (0) 7461-9344-26  
claudia.mirci@sopro-comeg.com

## SOPRO-COMEG REPRESENTATIVE OFFICES

**Our local staff will support you, wherever you are in the world.**

• **China** - ACTEON China  
Office 401  
No.12 Xinyuanxili Zhong Street,  
Chaoyang District, Beijing 100027  
Tel +86 10 646 57011/2/3  
info.cn@sopro-comeg.com

• **Middle East** - ACTEON Middle East  
Numan center 1st Floor N°111  
Gardens street  
PO box 468 - 11953 Amman Jordan  
Tel +962 6 553 4401  
info.me@sopro-comeg.com

• **USA** - ACTEON Inc.  
124 Gaither Drive, Suite 140  
Mount Laurel, NJ 08054  
Tel +1 856 222 9988  
info.us@sopro-comeg.com

• **Russia** - ACTEON Russia  
Valdayskiy Proezd 16  
Office 243  
125445 Moscow  
Tel + 7 499 76 71 316  
info.ru@sopro-comeg.com

• **Taiwan** - ACTEON Taiwan  
14F.-1, N°433, Jingping Rd.  
Jhonghe City - Taipei County 235  
Tel +866 926 704 505  
tina.chu@tw.acteongroup.com

• **India** - ACTEON India  
B-94 G.I.D.C ELECTRONIC ESTATE  
Sector 25  
Gandhinagar - Gujarat - 382023  
Tel +91 (79) 2328 7473  
ajay.sadana@in.acteongroup.com

• **United Kingdom** - ACTEON UK  
Unit 1 Steel close, Eaton Socon, St Neots  
Cambridgeshire, PE19 8TT  
Tel +44 1480 477 307  
info@acteongroup.co.uk  
www.acteongroup.co.uk

• **Germany** - ACTEON GmbH  
Industriestraße 9,  
40822 Mettmann  
Tel +49 2104 956510  
timo.hand@de.acteongroup.com

• **Italy** - ACTEON Italia  
Via Roma 45  
21057 Olgiate Olona ( Varese)  
Tel : +39 0331 376 760  
andrea.castellini@acteongroup.com





## 2 VIDEO CAMERAS

ORION - 3Cmos Full HD camera . . . . .	p12
SOPRO 397 - 3CCD Full HD camera . . . . .	p14
SOPRO 368 - 3CCD HD camera . . . . .	p16
SOPRO 367 - 3CCD camera. . . . .	p18
SOPRO 184 - 1CCD camera. . . . .	p20
SOPRO 165 - 1CCD camera. . . . .	p22
with integrated LED light source - DUO	
SOPRO 181 - 1CCD USB camera - Ubicam. . . . .	p24
UBIPACK - Full consulting room pack . . . . .	p26
Accessories for video cameras . . . . .	p28

# 2 VIDEO CAMERAS

SYMBIOZ  
ORION



Lead everything in one click

- **Six preset environments to fit your surgical application**
- **Full HD integrated video recorder**
- **Built-in HD zoom**
- **All features available from the camera head**
- **3CMOS full HD sensors for impressive image quality**



# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- 6 optimized preset applications
- Instant and contactless access to preset applications and personal profiles with the SCard
- Unlimited personal profiles
- Connected to Sirius & Vega
- Full HD Images and videos recorder integrated
- All functions available from the camera head (NAV)
- Freeze, mirror and gain functions
- Brightness, details, red and blue gains, gamma, color adjustments
- Noise reducer
- Reset to manufacturer settings
- Electronic anti-moire filter for flexible endoscopes
- Automatic white balance
- Color bar generator
- Automatic electronic shutter (1/50 to 1/100000)
- Adjustable or automatic shutter area
- On screen displayed adjustments
- Automatic blemish pixels compensation
- Outputs : DVI, HDSDI, Y/C, Comp, Periph
- Dimensions (W x H x D) : 310 x 136 x 385 mm
- Weight : 4300 g
- Power supply : (90-230 VAC~ ; 50-60Hz)
- Power consumption : 60VA
- 2T 2.5A – 250V fuses (only fuses marked UR)

## SPECIFICATIONS OF THE CAMERA HEAD

- 3CMOS 1/3 " Full HD sensors
- HD 16-34mm zoom integrated
- Resolution 1920 x 1080 pixels
- 3 fully programmable buttons
- Ergonomic design
- Progressive scan technology
- Ergonomic focus/zoom rings
- Free scope rotation and locking system
- Definition : 1080 lines
- Sensitivity : 5 lux
- Signal/Noise ratio : 54 dB
- Cable length : 3m
- Dimensions (D x H) : 149 x 53 mm
- Weight : 270 g
- Waterproof for cold disinfection\*

## REGULATORY & ENVIRONMENT

- Electrical safety : Class 1, CF type
- Comply with the European standard 93/42/EEC – Class I
- Comply with the international standards IEC 60601-1 ; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range : +10°C/+40°C
- Operating relative humidity range : 30% à 75%
- Transport and storage temperature range : -10°C / +45°C
- Transport and storage relative humidity range : 20 à 85%
- Operating, transport and storage atmospheric pressure range : 700hPa à 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air oxygen or nitrous oxide.

Art.N°	Description
S_398_8000	ORION Full HD camera head with integrated HD 16-34mm zoom coupler
S_398_9000	ORION Full HD CCU, EU
S_398_9001	ORION Full HD CCU, US
S_398_9002	ORION Full HD CCU with Full HD recorder integrated, EU
S_398_9003	ORION Full HD CCU with Full HD recorder integrated, US
S_K30_1000	Pack Symbioz, EU (Including ORION**, SIRIUS and VEGA)
S_K30_1001	Pack Symbioz, US (Including ORION**, SIRIUS and VEGA)
990228	Application SCards pack (Laparoscopy, Hysteroscopy, Cystoscopy, ENT, Arthroscopy, Flexible)

\* See user manual for more information - \*\* With full HD recorder

# 2 VIDEO CAMERAS

3CCD Full HD camera

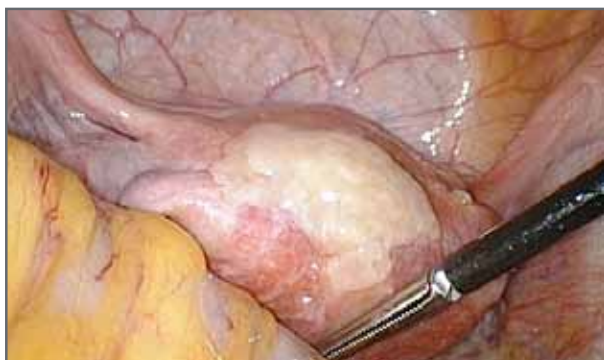
SOPRO  
**397**



The most detailed image

- **Stunning video rendering**
- **Optimized settings per surgical application**
- **Camera head with 3 programmable buttons**
- **Control of insufflator**
- **On-screen display of insufflator parameters**
- **Reliable optical zoom to fit all surgical applications**

icons



# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Digital zoom Up to 2.5x
- Freeze, Mirror and Gain functions
- Menu by Application
- Electronic anti-moire filter for flexible endoscopes
- Digital processing 3 x 19 bits
- Automatic white balance
- 5 languages (English, French, German, Spanish, Italian)
- Color bar generator
- Modification of the red and the blue gain
- Color Matrix 12 axes
- Automatic saving of the adjusted parameters
- Automatic electronic shutter (1/50 to 1/100 000)
- Adjustable shutter area
- On screen displayed adjustments
- Text generator with keyboard connexion
- Gamma adjustment
- Automatic adjustment of sensitivity to low light (auto exposure control)
- Automatic black level adjustment
- Details adjustment
- Digital Noise Reduction: OFF / LOW / HIGH
- Two peripheral triggerings
- Reset to manufacturer settings
- Automatic compensation function for blemish pixels
- Size of the control unit: W: 300mm; D: 311mm; H: 125 mm
- Weight of the control unit: 2500 g
- 1 DVI-D output
- 2 HD-SDI outputs: 0.8 V [P-P] / 75 ohms SMPTE292M
- 1 RGB output: 3x0.7 V [P-P] & 0.3V [P-P] / 75 ohms
- 1 Y/C output: Y: 1.0 V [P-P] / 75 ohms, C: 0.286 V [P-P] (NTSC), C:300 Vp-p V [P-P] (PAL) / 75 ohms Sync Negative
- 1 VBS output: 1.0 V [P-P] / 75 ohms Sync Negative
- Power supply: (110-230 VAC ~ ; 50 - 60Hz)
- Power consumption: 45 VA
- 2 T 2.5A - 250 V fuses (Only fuses marked UR)
- Continuous Service

## SPECIFICATIONS OF THE CAMERA HEAD

- Ultra small camera head with its micro prism technology
- Sensor: 3 CCD 1/3" (16/9 "wide - screen format acquisition")
- Progressive Scan Technology
- 1080p resolution HDTV format: Resolution: 1920\*1080 pixels
- 14 bits processing
- Ergonomic focus ring
- Free scope rotation and locking system
- 3 Programmable buttons
- Definition: 1080 lines
- Sensitivity: 1,5 lux
- Signal / Noise ratio : 70dB
- Cable length: 3 meters
- C-Mount
- Size of the sensor: 37\*50\*95 mm
- Weight of the sensor: 250 g
- Waterproof for cold disinfection\*

## REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_397_9000	Digital FULL HD 16/9 3CCD CCU, EU
S_397_9001	Digital FULL HD 16/9 3CCD CCU, US
S_397_8000	Digital FULL HD 16/9 3CCD camera head, C-mount
S_097_0001	24mm HD coupler, C-mount, scope holder
S_097_0002	24mm HD coupler, C-mount, scope holder, with high torque focus ring
S_413024	16-34mm HD Zoom coupler, C-mount, scope holder
S_701004	18mm beamsplitter 90°, C-mount, rotatable head, without eyepiece
700206	Medical keyboard, soakable, QWERTY, PS2

\* See user manual for more information



# 2 VIDEO CAMERAS

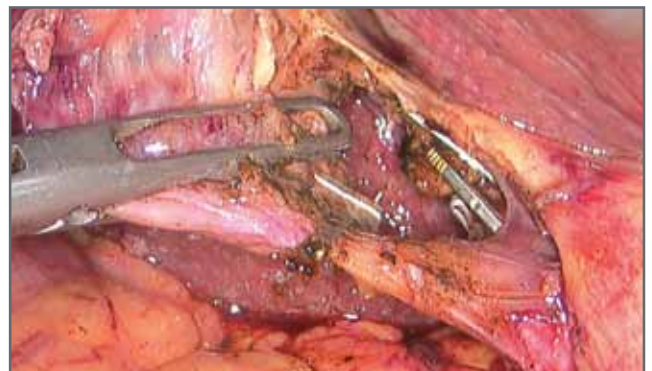
3CCD HD camera

SOPRO  
**368**



Optimal image quality

- **Outstanding image quality**
- **Menu by applications and user's profiles**
- **On-Screen display menu**
- **Ergonomic design of camera head**
- **Camera head with 2 programmable buttons**
- **Control of peripheral devices**





# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- On screen displayed adjustments
- Adjustable shutter area
- Automatic mechanical shutter (1/50 to 1/100 000)
- Backlight function for arthroscopy
- Electronic anti-moire filter for flexible endoscopes
- Video enhancement
- Modification of the red and the blue gain
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Menu per application
- Color bar generator
- Automatic white balance
- Automatic saving of the adjusted parameters
- 2 remote control outputs (Jack 2.5 and 3.5mm)
- Reset to manufacturer settings
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 2500 g
- 1 DVI-D high resolution SXGA output (1280\*1024 pixels)
- 1 RGB-S video output (3x0,7Vcc/& 0,3Vcc/75Ω)
- 1 Y/C video outputs (1 Vcc & 0,3 Vcc / 75Ω Sync Negative)
- 1 composite video outputs (1 Vcc / 75Ω)
- Power supply: (110-230 VAC ~ ; 50 - 60Hz)
- Power consumption : 45VA
- Two T 800 mA - 250 V fuses (Only fuses marked UR)
- Continuous Service

## SPECIFICATIONS OF THE CAMERA HEAD

- Ultra small camera head with its micro prism technology
- Scanning (624 lines/50Hz)PAL, (525 lines/60Hz)NTSC
- Sensor: 3 CCD 1/4" (4/3" format acquisition)
- C-Mount
- Resolution: 3 x (752 x 582) PAL ; 3 x (768 x 494) NTSC
- Definition: 1024 lines
- Sensitivity: 3 lux
- Ergonomic focus ring
- Free scope rotation and locking system
- 2 programmable buttons
- Signal / Noise ratio: 60 dB
- Size of the sensor: L = 80mm; Ø = 32 mm
- Weight of the sensor: 250 g
- Cable length: 3,60 meters
- Waterproof for cold disinfection\*

## REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_368_9000	Digital HD 3CCD CCU, PAL, DVI output
S_368_9001	Digital HD 3CCD CCU, NTSC, DVI output
S_367_8000	Digital HD 3CCD camera head, C-mount, PAL
S_367_8001	Digital HD 3CCD camera head, C-mount, NTSC
S_367_0002	18mm HD coupler, C-mount, scope holder
S_367_0003	18mm HD coupler, C-mount, scope holder, with high torque focus ring
S_413024	16-34mm HD zoom coupler, C-mount, scope holder

\* See user manual for more information

# 2 VIDEO CAMERAS

3CCD camera

SOPRO  
**367**



The classic 3CCD model

- **Impressive image quality**
- **Menu by applications and user's profiles**
- **On-Screen display menu**
- **Ergonomic design of camera head**
- **Camera head with 2 programmable buttons**
- **Control of peripheral devices**



# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- On screen displayed adjustments
- Adjustable shutter area
- Automatic electronic shutter (1/50 to 1/100 000)
- Backlight function for arthroscopy
- Electronic anti-moire filter for flexible endoscopes
- Video enhancement
- Modification of the red and the blue gain
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Menu per application
- Color bar generator
- Automatic white balance
- Automatic saving of the adjusted parameters
- 2 remote control outputs (Jack 2.5 and 3.5mm)
- Reset to manufacturer settings
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 2500 g
- 1 RGB-S video output (3x0,7Vcc/& 0,3Vcc/75Ω)
- 1 Y/C video outputs (1 Vcc & 0,3 Vcc / 75Ω Sync Negative)
- 1 composite video outputs (1 Vcc / 75Ω)
- Power supply: (115-230 VAC ~ ; 50 - 60Hz)
- Power consumption : 45VA
- Two T 800 mA - 250 V fuses (Only fuses marked UR)
- Continuous Service

## SPECIFICATIONS OF THE CAMERA HEAD

- Ultra small camera head with its micro prism technology
- Scanning (624 lines/50Hz)PAL, (525 lines/60Hz)NTSC
- Sensor: 3 CCD 1/4"
- C-Mount
- Resolution: 3 x (752 x 582) PAL ; 3 x (768 x 494) NTSC
- Definition: 750 lines
- Ergonomic focus ring
- Free scope rotation and locking system
- 2 programmable buttons
- Sensitivity: 3 lux
- Signal / Noise ratio : 60 dB
- Silicone medical grade cable, no shape memory, easy to roll up, high resistance
- Size of the sensor: L = 80mm; Ø = 32 mm
- Weight of the sensor: 250 g
- Cable length: 3,60 meters
- Waterproof for cold disinfection\*

## REGULATORY & ENVIRONMENT

- Electrical safety : Class 1, BF type
- Comply with the European standard 93/42/EEC- Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_367_9000	Digital 3CCD CCU, PAL,
S_367_9001	Digital 3CCD CCU, NTSC
S_367_8000	Digital HD 3CCD camera head, C-mount, PAL
S_367_8001	Digital HD 3CCD camera head, C-mount, NTSC
S_367_0002	18 mm HD coupler, C-mount, scope holder
S_367_0003	18 mm HD coupler, C-mount, scope holder,with high torque focus ring
S_413024	16-34mm HD Zoom coupler, C-mount, scope holder

\* See user manual for more information

# 2 VIDEO CAMERAS

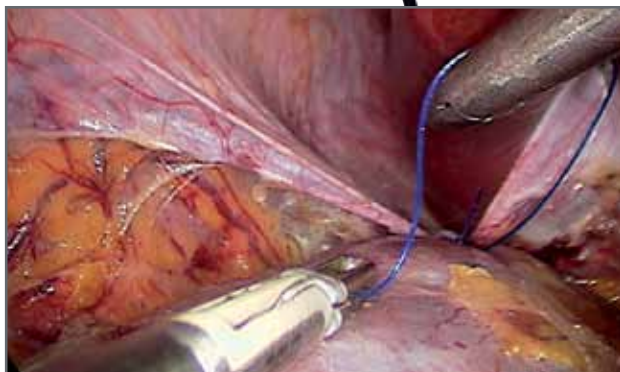
1 CCD camera

SOPRO  
**184**



## Performance and simplicity

- Available with regular and pendular sensor
- Compatible with rigid and flexible endoscopes
- Outstanding image quality
- Multidisciplinary
- Intuitive interface
- Direct computer link through USB to be used with Sopro Imaging medical software



# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Automatic video settings detection mode
- Automatic white balance with **ICE** technology
- Anti-moiré filter for flexible endoscopes
- Automatic electronic shutter (1/50 à 1/100 000)
- Video enhancement
- Intuitive menu with navigation wheel
- Menu by applications and user's profile
- Modification of the red and the blue gain
- Adjustable shutter area
- Gamma adjustment
- 5 languages (English, French, German, Spanish, Italian)
- Reset manufacturer settings
- Color bar generator
- Automatic saving of the adjusted parameters
- 1 remote control output
- 1 RGBS video output (3 x 0,7 Vcc / & 0,3 Vcc / 75Ω Sync Negative)
- 1 Y/C video output (1 Vcc & 0,3 Vcc / 75Ω Sync Negative)
- 1 composite video output (1 Vcc / 75Ω )
- 1 USB2 output
- 2 digital SDI outputs (option)
- Size of the control unit: W: 300mm; D: 300mm; H: 66 mm
- Weight of the control unit: 1500 g
- Power supply: (110-230 VAC ~ ; 50/60 Hz)
- Power consumption: 25 VA
- Two T 800 mA - 250V fuses (only fuses marked UL)
- Continuous service

## SPECIFICATIONS OF THE STANDARD CAMERA HEAD

- Sensor: CCD 1/4" high sensitivity
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Sensitivity: 2 lux
- Free scope rotation and locking system
- 2 fully programmable buttons (white balance, capture of images or videos, gamma, details,...)
- Waterproof camera head for cold disinfection\*
- Cable length: 3 meters
- C-Mount
- Size of the sensor: L: 87 mm ; Ø: 30 mm
- Weight of the sensor: 210 g

## SPECIFICATIONS OF THE PENDULAR CAMERA HEAD

- Sensor: CCD 1/4" high sensitivity
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Sensitivity: 2 lux
- 360° quick-lock system
- 1 fully programmable wheel
- Waterproof camera head for cold disinfection\*
- Cable length: 3 meters
- Integrated coupler: F12 or F15 mm
- Size of the sensor: L: 80 mm; Ø: 32 mm
- Weight of the sensor: 110 g

## REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -20°C / +40°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_184_9100	CCU PAL/NTSC, USB2 output, SIM software (trial version) - EU
S_184_9101	CCU PAL/NTSC, USB2 output, SIM software (trial version) - US
S_184_9102	CCU PAL/NTSC, USB2 output, SIM software (trial version), 2 SDI outputs - EU
S_184_9103	CCU PAL/NTSC, USB2 output, SIM software (trial version), 2 SDI outputs - US
S_184_8100	1CCD camera head, PAL, C-Mount
S_184_8101	1CCD camera head, NTSC, C-Mount
S_084_0001	18.5 mm coupler, C-Mount, scope holder
S_084_0007	13mm coupler, C-Mount, scope holder
See us	1CCD pendular camera head, PAL or NTSC, 12.3 or 15 mm integrated coupler

\* See user manual for more information



# 2 VIDEO CAMERAS

1 CCD camera  
with 120 W\* LED light source

**DUO** by SOPRO



The perfect match between light and image

- **Fully automatic**
- **Great image quality**
- **User-friendly**
- **Smart and automated functions thanks to iCe<sup>new</sup> technology**
- **Compatible with both rigid and flexible endoscopes**
- **Eco-friendly and powerful LED light source**



\*equivalent to 120 Watts Xenon light Source

# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE CAMERA CONTROL UNIT (CCU)

- Automatic video settings detection
- Automatic electronic shutter (1/50 à 1/100 000)
- Video enhancement
- Electronic anti-moire filter for flexible endoscopes
- White balance with **iCe** feature
- Continuous service

## SPECIFICATIONS OF THE LIGHT SOURCE

- LED technology
- Light intensity of a 120W Xenon light source
- LED lifetime: up to 50 000 hours
- Color temperature:  $\geq 4\,500^{\circ}\text{K}$

## SPECIFICATIONS OF THE CAMERA HEAD

- Sensor: CCD 1/4" high sensitivity
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Definition: 500 lines
- Sensitivity: 2 lux
- Signal / noise ratio: 52 dB
- Ergonomic focus ring
- Free scope rotation and locking system
- C-mount
- 2 ergonomic buttons
- Waterproof for cold disinfection
- Dimensions: L: 87 mm ;  $\varnothing$ : 30 mm
- Weight: 210 g
- Cable length: 3 meters

## GENERAL SPECIFICATIONS

- Dimensions (W x H x D) : 300 x 66 x 300 mm
- Weight: 2400 g
- 1 Y/C video output (1 Vcc & 0.3 Vcc / 75 $\Omega$  Sync Negative)
- 1 composite video output (1 Vcc / 75 $\Omega$ )
- Power supply: (100-230 VAC ~ ; 50/60 Hz)
- Power consumption: 86 VA
- Two T 800 mA - 250 V fuses (only fu marked UL)
- Safety: Class 1, BF type applied part

## REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1 ; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -20°C / +40°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_K16_1000	Pack DUO with CCU + PAL sensor + 18.5mm coupler
S_K16_1001	Pack DUO with CCU + NTSC sensor + 18.5mm coupler
S_K16_1009	Pack DUO with CCU + PAL sensor + 13mm coupler
S_084_0007	13mm coupler, C-Mount, scope holder
402046	Olympus light source adapter for DUO by Sopro

# 2 VIDEO CAMERAS

1 CCD USB camera

UBICAM<sub>®</sub>  
digital diagnosis set



The best USB solution



- **Digital image quality**
- **User-friendly**
- **Smart and automated functions thanks to iCe<sup>™</sup> technology**
- **Compatible with both rigid and flexible endoscopes**
- **Direct USB2.0 link**



# 2 VIDEO CAMERAS

## SPECIFICATIONS OF THE USB CAMERA HEAD

- Sensor: CCD 1/4" high sensitivity
- Automatic video setting detection
- Resolution: (752 x 582) PAL ; (768 x 494) NTSC
- Definition: 470 lines
- Sensitivity: 2 lux
- Signal/Noise Ratio: 52 dB
- Automatic electronic shutter: (1/50 to 1/100 000)
- Adjustable shutter area
- Automatic white balance
- Video enhancement
- Modification of the video parameters
- Automatic saving of the adjusted parameters
- Electronic anti-moire filter for flexible endoscopes
- 2 programmable buttons allowing: Freeze, record, white balance, anti-moire filter activation
- Immersible USB connector
- Virtual Camera Control Unit: (Automatic White Balance, video parameters, Flexible or rigid applications, Shortcuts)
- Automatic detection of the colour temperature according to the used light source
- Size of the sensor: L = 87mm, Ø = 30 mm
- Weight of the sensor: 210 g
- Cable length: 3 meters
- 1 USB 2.0 output
- Power supply: 5 V DC
- Power consumption: 2.5 VA
- Waterproof for cold disinfection\*
- Continuous Service

## RECOMMENDED COMPUTER CONFIGURATION FOR SOPRO IMAGING SOFTWARE

- Operating system: Windows 7
- Processor: Intel Core2
- RAM: 2 Gb
- Hard disk: 1 Tb
- USB ports: 4 USB 2.0 Hi-Speed ports
- Graphics Card: with NVIDIA or ATI chipset / 512 MB of unshared video RAM with support for DirectX 9 or higher
- USB chipset: Intel or NEC
- Screen Resolution: 1280 x 1024 or higher

## REGULATORY & ENVIRONMENT

- Electrical safety: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +35°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_181_0011	UBICAM, USB2 stand alone solution, PAL, C-mount, SIM software (test version)
S_181_0015	UBICAM, USB2 stand alone solution, NTSC, C-mount, SIM software (test version)
S_084_0001	18.5mm coupler, C-mount, scope holder
505026	Sopro Imaging Medical license
S_K10_2006	UBICAM PLUS PAL: Ubicam + coupler + one licence of Sopro Imaging Medical software
S_K10_2007	UBICAM PLUS NTSC: Ubicam + coupler + one licence of Sopro Imaging Medical software

\* see user manual for more information

# 2 VIDEO CAMERAS

UBIPACK<sub>ENT</sub>  
UBIPACK<sub>GYN</sub>

Full consulting room pack



UBlight



SOPRU  
imaging



A unique concept

- All in one package designed for consulting room
- Outstanding image quality
- Easy to use
- Powerful imaging software
- Better communication with patients



# 2 VIDEO CAMERAS

UBIPACK  
GYN



Art.N°	Description
S_K10 2000	UBIPACK GYN PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + Hysteroscope 2,7 mm 30° + Hysteroscopy sheath 14,9Fr double rotative stopcock WK channel 5Fr
S_K10 2002	UBIPACK GYN NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + Hysteroscope 2,7 mm 30° + Hysteroscopy sheath 14,9Fr double rotative stopcock WK channel 5Fr
S_K10 2001	UBIPACK GYN PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + Hysteroscope 2,7 mm 30° + 10,5Fr diagnostic sheath
S_K10 2003	UBIPACK GYN NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + Hysteroscope 2,7 mm 30° + 10,5Fr diagnostic sheath

UBIPACK  
ENT



Art.N°	Description
S_K10 1000	UBIPACK ENT PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 0°
S_K10 1001	UBIPACK ENT NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 0°
S_K10 1002	UBIPACK ENT PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 30°
S_K10 1003	UBIPACK ENT NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 30°
S_K10 1004	UBIPACK ENT PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 45°
S_K10 1005	UBIPACK ENT NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 45°
S_K10 1006	UBIPACK ENT PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 70°

Art.N°	Description
S_K10 1007	UBIPACK ENT NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + sinuscope 4.0 mm 70°
S_K10 1008	UBIPACK ENT PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + otoscope 4.0 mm 0°
S_K10 1009	UBIPACK ENT NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + otoscope 4.0 mm 0°
S_K10 1010	UBIPACK ENT PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + otoscope 3.0 mm 0°
S_K10 1011	UBIPACK ENT NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable + otoscope 3.0 mm 0°
S_K10 1013	UBIPACK ENT Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler with Ulyss - PAL + Ubilight + light cable + Ulyss
S_K10 1014	UBIPACK ENT Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler with Ulyss - NTSC + Ubilight + light cable + Ulyss

Art.N°	Description
S_K10 1015	UBIPACK PAL Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable
S_K10 1016	UBIPACK NTSC Camera Ubicam + one licence of SOPRO IMAGING Medical + coupler + Ubilight + light cable

# 2 VIDEO CAMERAS

## ACCESSORIES FOR VIDEO CAMERAS



Art.-No.	Description
S_097_0001	24mm HD coupler C-mount, scope holder with locking capacity for S_397 camera head weight : 60g waterproof
S_097_0002	24mm HD coupler C-mount, scope holder with locking capacity for S_397 camera head with high torque focus ring for Arthroscopy weight : 60g waterproof



Art.-No.	Description
S_067_0004	22mm coupler C-mount, scope holder with locking capacity, for S_169 & S_162 camera heads weight : 44g waterproof
S_067_0002	22mm coupler C-mount, scope holder with locking capacity, for S_169 & S_162 camera heads with high torque focus ring for Arthroscopy weight : 44g waterproof



Art.-No.	Description
S_367_0002	18mm HD coupler C-mount, scope holder with locking capacity, for S_367 & S_368 camera heads weight : 54g waterproof
S_367_0003	18mm HD coupler C-mount, scope holder with locking capacity, for 367 & S_368 camera heads with High torque focus ring for Arthroscopy weight : 54g waterproof



Art.-No.	Description
S_084_0001	18,5mm coupler C-mount, scope holder with locking capacity for S_165 & S_184 camera heads weight: 20g waterproof
S_084_0007	13mm coupler C-mount, scope holder with locking capacity for S_165 & S_184 camera heads weight: 20g waterproof

# 2 VIDEO CAMERAS

## ACCESSORIES FOR VIDEO CAMERAS



Art.-No.	Description
S_701004	18mm Beamsplitter 90° C-mount, 360° rotatable head with locking capacity, without eyepiece, for S_397 camera head waterproof



Art.-No.	Description
S_413024	16-34mm HD Zoom coupler C-mount, scope holder for all camera heads waterproof



Art.-No.	Description
700145	USB2 Amplifier 5 meters long for S_181



Art.-No.	Description
700206	Medical Keyboard soakable, QWERTY, PS2, for S_397 video camera & USB300/200 archiving systems



Art.-No.	Description
302027	Storz/Olympus Adapter for Flexible Scopes



Art.-No.	Description
302032	Pentax Adapter for Flexible Scopes



Art.-No.	Description
302030	Fujinon Adapter for Flexible Scopes

# 2 VIDEO CAMERAS

## ACCESSORIES FOR VIDEO CAMERAS



Art.-No.	Description
009002	Footswitch for S_162 with USB2 output (jack connector)

Art.-No.	Description
009009	USB footswitch for Sopro Imaging Medical

Art.-No.	Description
700381	USB2 Amplifier (5m) for UBICAM

Art.-No.	Description
002158	Small USB extension (0.8m) for UBICAM

icons

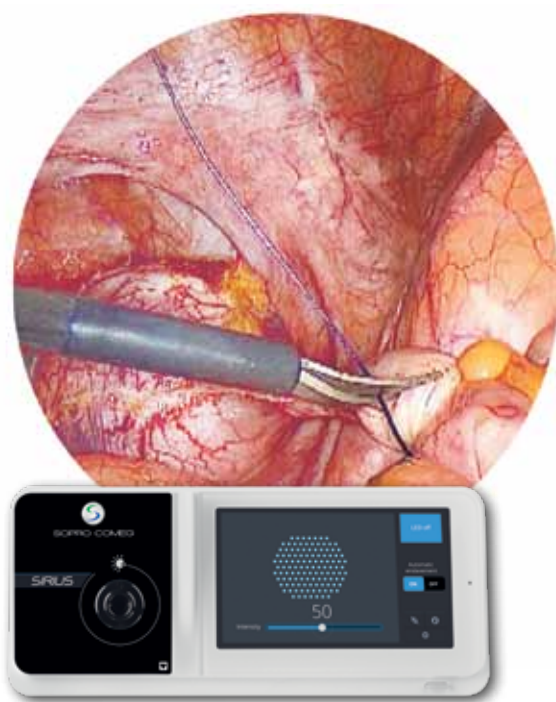
Art.-No.	Description
S_397_1000	Communication kit for SOPRO 397 and SOPRO 640 (30 & 45L)

Art.-No.	Description
700337	Jack-USB adaptor for S_184 camera and Sopro Imaging Software









# 3 LIGHT SOURCES

SIRIUS, LED light source .....	p34
SOPRO 230, 218 and 210 Xenon light sources.....	p36
SOPRO 284 180W LED light source.....	p38
SOPRO 281 100W LED light source.....	p40
Light sources accessories.....	p42
Light cables .....	p42
Light cables accessories.....	p43

# 3 LIGHT SOURCES

SYMBIOZ  
*SIRIUS*



Simply powerful

- **Latest LED generation for a powerful light in any applications under any circumstances**
- **Automatic adjustment of light intensity according to your clinic**
- **Remote controlled from ORION camera head**
- **Noiseless and ecofriendly**



# 3 LIGHT SOURCES

## SPECIFICATIONS

- LED technology
- LED lifetime : up to 40.000 h
- Color temperature : 6000°K
- Light intensity of a 300W Xenon light source
- Automatic adjustment of the light intensity
- Anti-blooming feature with light cable detection
- Standby mode
- Electronic iris
- Service menu with key information
- Automatic over temperature protection
- 7" 16/9 touchscreen with intuitive interface
- Compatible with Storz and Olympus type light cables
- Dimensions (W x H x D) : 310 x 136 x 385 mm
- Weight : 5000 g
- Power consumption : 160 VA
- Power supply : (90-230 VAC~ ; 50-60Hz)

## REGULATORY & ENVIRONMENT

- Electrical protection: Class 1, CF type
- Comply with the European standard 93/42/EEC - Class IIa.
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_298_0001	SIRIUS LED light source, EU
S_298_0002	SIRIUS LED light source, US
S_K30_1000	Pack Symbioz, EU (Including ORION*, SIRIUS and VEGA)
S_K30_1001	Pack Symbioz, US (Including ORION*, SIRIUS and VEGA)

\* With Full HD recorder

# 3 LIGHT SOURCES

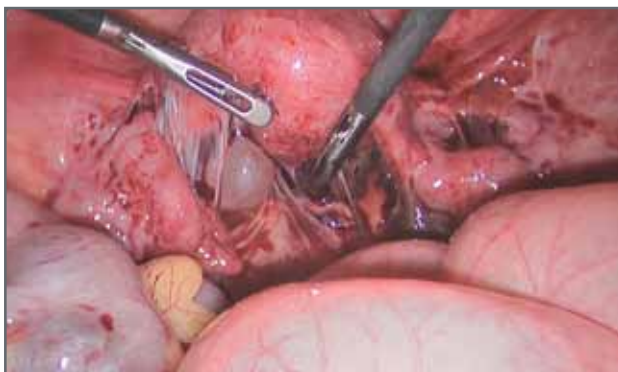
Xenon light sources

SOPRO  
**230**



High intensity light sources

- **Anti blooming system with light cable detection**
- **Display of light intensity (0-100%) and age of the bulb**
- **Infrared filter protection for light cable**



# 3 LIGHT SOURCES

## COMMON SPECIFICATIONS

- Antiblooming system with light cable detection
- Light intensity adjustment with touch buttons
- Light intensity and bulb age displayed on LCD screen
- Stand-by button (Mechanical iris)
- Easy access to the bulb
- Infrared filter: the light cable can stay in the light source without any risk of over - heating
- Bulb lifetime: 500 hours
- Dimensions: D: 300mm; W: 311mm; H: 125 mm
- Weight: 5 kg
- Power supply: (100 - 230 VAC ~ / 50 - 60 Hz)
- 2 Fuses T 4A. (UL/CSA only)
- Continuous service

## DEDICATED SPECIFICATIONS

	Sopro 230	Sopro 218	Sopro 210
Nominal operating power	300W	180W	100W
Color T°	6200°K	5800°K	5800°K
Power consumption	485VA	450VA	240VA

## REGULATORY & ENVIRONMENT

- Electrical protection: Class 1, CF type
- Comply with the European standard 93/42/EEC - Class IIa.
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_230_0002	300 Watts, EU Power Cord - Storz® adapter
S_230_0007	300 Watts, EU Power Cord - Olympus® adapter
S_230_0005	300 Watts, US Power Cord - Storz adapter
S_230_0009	300 Watts, US Power Cord - Olympus adapter
S_218_0007	180 Watts, EU Power Cord - Storz adapter
S_218_0010	180 Watts, EU Power Cord - Olympus adapter
S_218_0006	180 Watts, US Power Cord - Storz adapter
S_218_0011	180 Watts, US Power Cord - Olympus adapter
S_210_0003	100 Watts, EU Power Cord - Storz adapter
S_210_0004	100 Watts, EU Power Cord - Olympus adapter
S_210_0002	100 Watts, US Power Cord - Storz adapter
S_210_0006	100 Watts, US Power Cord - Olympus adapter
See us	300, 180 and 100W, EU or US power cords, Wolf® adapter

# 3 LIGHT SOURCES

180W\* LED light source

SOPRO  
**284**



Brighten your world!

- As powerful as a 180W Xenon light source
- LED lifespan up to 50,000 hours
- Daylight color temperature\*\* for optimum contrast
- OLED data display



\*equivalent to 180 Watts Xenon light Source

\*\*6500°K



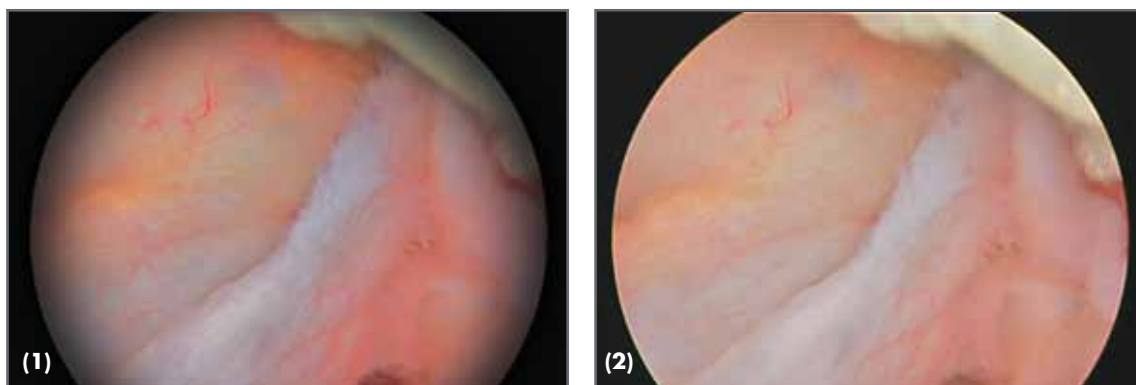
# 3 LIGHT SOURCES

## SPECIFICATIONS

- LED technology
- Light intensity of a 180W Xenon light source
- Color temperature: 6 500°K
- LED lifetime : up to 50.000h
- Intuitive adjustment of the light intensity
- Light intensity memory
- Anti-blooming feature with light cable detection
- Standby mode
- Electronic iris
- Automatic over temperature protection
- 2.7" OLED screen
- Size (D x W x H) : 300 x 300 x 66 mm
- Weight : 3 000 g
- Power consumption: 140 VA
- Input voltage: 100-230 VAC / 50-60 Hz
- Compatible with Storz type light cables (Olympus in option)
- Continuous service

## REGULATORY & ENVIRONMENT

- Electrical protection: Class 1, CF type
- Comply with the European standard 93/42/EEC - Class IIa.
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.



Comparison of homogeneity of light between a Xenon (1) and the Sopro 284 LED (2) light source

Art.N°	Description
S_284_0001	LED light source (light intensity of a 180W Xenon light source) - EU power cord - Storz type
S_284_0002	LED light source (light intensity of a 180W Xenon light source) - US power cord - Storz type
S_284_0003	LED light source (light intensity of a 180W Xenon light source) - EU power cord - Olympus type
S_284_0004	LED light source (light intensity of a 180W Xenon light source) - US power cord - Olympus type

# 3 LIGHT SOURCES

100W\* LED light source



Designed for consulting room

- **Well designed and compact**
- **Accurate colors depiction**
- **Uniform light**
- **LED lifespan up to 50 000 hours**



\*equivalent to 100 Watts Xenon light Source



# 3 LIGHT SOURCES

## SPECIFICATIONS

- LED technology
- Light intensity of a 100W Xenon light source
- LED lifetime: 50.000 hours (in advised conditions of use)
- Color temperature: > to 4500°K
- Light cable input: Storz only
- Stand-by mode with light intensity memory
- Antiblooming system with light cable detection
- Automatic over temperature protection
- Low heat generation
- Manual adjustment of the light intensity
- Dimensions: D: 180mm; W: 95mm; H: 35mm
- Weight: 320g
- Power supply: (100 - 240 VAC ~ / 50 - 60 Hz)
- Power consumption: 30 VA
- Transformer: 12V DC
- Continuous service

## REGULATORY & ENVIRONMENT

- Electrical protection: Class 1, BF type
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_281_0001	LED light source with external transformer
402046	Olympus ® connector for S_281 LED light source

# 3 LIGHT SOURCES

## ACCESSORIES FOR LIGHT SOURCES

### Replacement Bulbs



Art.-No.	Description
006003	300W Xenon bulb
006005	180W Xenon bulb



Art.-No.	Description
006004	100W Xenon bulb

## LIGHT CABLES



- **Compatible with all light sources and autoclavable at 134°**
- Reinforced sheath
- Universal model delivered without connector

Ø	L.	Art.-No.
4.8mm	3	S_700382
	2.3	S_700384
3.5*	3	S_700216
	2.3	S_700215

\*For scope diameter <4mm



Art.-No.	Description
700602	90° connector Eases the use of the camera and the light cable together Prevents damages to the light cable

# 3 LIGHT SOURCES

## ACCESSORIES FOR LIGHT SOURCES

### Endoscope side connectors



Art.-No.	Description
700051	Storz/Olympus



Art.-No.	Description
700043	Wolf/S&N



Art.-No.	Description
700048	Acmi/Stryker

### Light source side connectors



Art.-No.	Description
700044	Storz



Art.-No.	Description
700045	Olympus

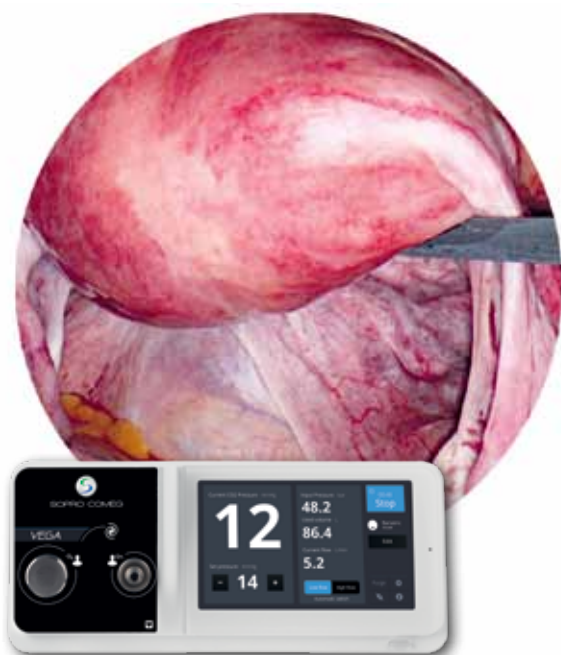


Art.-No.	Description
700046	Wolf/S&N



Art.-No.	Description
700047	Acmi/Stryker





# 4 INSUFFLATORS

VEGA - 45L insufflator .....	p46
SOPRO 640 - 45L, 30L and 20L insufflators.....	p48
Accessories .....	p50

# 4 INSUFFLATORS

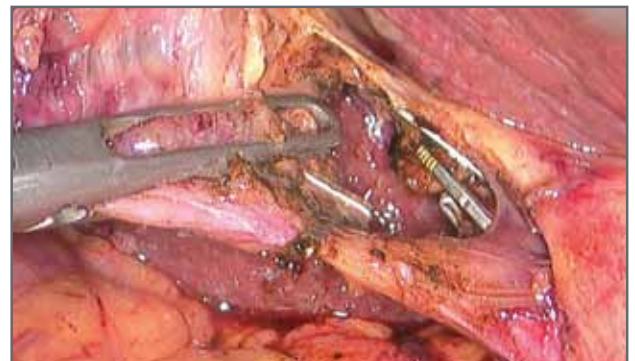
## Insufflators

SYMBIOZ  
*VEGA*



Security for the patient is the key word of this new generation

- **Powerful to keep the pneumoperitoneum inflated under any conditions**
- **Automatic flow rate adjustment to keep set pressure**
- **CO2 available directly displayed in minutes\***
- **External relief valve against cross contamination**



\*Patented feature

# 4 INSUFFLATORS

## SPECIFICATIONS

- Maximum flow : 45l/min in high flow mode – 2l/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy feature : Displays in minutes the remaining time of insufflation
- Set cavity pressure : From 0 to 24 mmHg (accuracy of 1 mmHg)
- 7" 16/9 touchscreen with intuitive interface
- Clear messages displayed both on touchscreen and main monitor
- External dessufflation valve for over pressure to avoid cross contamination
- External control from Orion camera head
- Purge feature
- Smooth design for easy disinfection
- Automatic low flow/high flow switching (option)
- Specific setting for Bariatric surgery
- Automatic calibration of the device
- Real time display of bottle pressure or central CO2 supply pressure
- Internal pre heating system
- CO2 gaz bottle compatible (max. 60bars)
- CO2 central gaz supply compatible (3.5 to 4bars)
- Disposable or reusable tubings
- Dimensions (W x H x D) : 310 x 136 x 385 mm
- Weight : 8000 g
- Power supply : (90-230 VAC~ / 50-60Hz)
- Power consumption : 75 VA
- 2x 2.5 AT – 250V time-lag fuses – UR
- Continuous service

## REGULATORY & ENVIRONMENT

- Electrical safety : Class 1
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_698_0001	VEGA 45L/min insufflator, EU
S_698_0002	VEGA 45L/min insufflator, US
S_K30_1000	Pack Symbioz, EU (Including ORION*, SIRIUS and VEGA)
S_K30_1001	Pack Symbioz, US (Including ORION*, SIRIUS and VEGA)

\* With Full HD recorder



# 4 INSUFFLATORS

Insufflators

SOPRO  
**640**



icons

The best option on the market for safer surgery

- **Management of the insufflator from the camera head**
- **Feedback of key data on the monitor**
- **Display of the remaining time before the end of the CO2 bottle**
- **Enhanced security with no loss of pressure, no cross contamination and no risk of mis programming**



# 4 INSUFFLATORS

## COMMON SPECIFICATIONS

- Maximum flow: 45 l/min in high flow mode - 2 l/min in low flow mode
- Automatic flow rate management according to leakages
- Patented autonomy function : display in real time the remaining time of insufflation
- Blow-off pressure: 0 to 24 mmHg (accuracy of 1 mmHg)
- Clear messages displayed with sound alarms
- External desufflation valve for over pressure to avoid cross contamination
- 5 languages (French, Italian, Spanish, English, German)
- Option of automatic low/high flow switching
- 5.7-inch LCD screen showing: immediate flow, intra-cavity pressure, blow-off pressure, total volume of CO2 used, chronometer
- Automatic calibration of the device
- Real time display of bottle pressure or central gas supply pressure
- Internal pre heating system
- Thumbwheel navigation and validation system
- CO2 gas bottle compatible (max 70 bars)
- CO2 central gas supply compatible (max 7 bar)
- Open-ended spanner intended for CO2 high-pressure hose connector
- Disposable or reusable tubings
- Dimensions: L=300mm, D=340mm, H=145mm
- Weight: 5 kg
- Main power cable
- Power supply: (100 - 230 VAC ~ / 50 - 60 Hz)
- Power consumption: 40VA
- 2 x 2.5 AT - 250V time-lag fuses - UR
- Continuous Service

## DEDICATED SPECIFICATIONS

	45L device	30L device	20L device
Maximum flow	45L/min	30L/min	20L/min
CO2 bottle purge	✓	✓	✓
Clear messages	✓	✓	✓
Preventive maintenance message	✓	✓	✓
Bottle & wall supply	✓	✓	
Autonomy feature	✓	✓	
External control via SORO 397 camera head	✓	✓	

## REGULATORY & ENVIRONMENT

- Electrical safety : Class 1
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1 ; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating Temperature range: +10°C / +40°C
- Operating Relative Humidity range: 30 to 75 %
- Transport and storage Temperature range: -10°C / +45°C
- Transport and storage Relative Humidity range: 20 to 85 %
- Operating, Transport and Storage Atmospheric pressure range: 700hPa to 1060hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_640_4002	45 L - EU Power Cord - with autonomy feature
S_640_4004	45 L - US Power Cord - with autonomy feature
S_640_3005	30 L - EU Power Cord - with autonomy feature
S_640_3008	30 L - US Power Cord - with autonomy feature
S_640_2002	20 L - EU Power Cord
S_640_2004	20 L - US Power Cord

# 4 INSUFFLATORS

## ACCESSORIES



Art.-No.	Description
607103L	Sterile single use insufflation tubing made of PVC including sterile viral CO2 filter 0,027µ delivered by pack of 20 pieces



Art.-No.	Description
607043L	Reusable insufflation tubing autoclavable



Art.-No.	Description
016006L	Sterile viral CO2 filter single use, 0,027µ delivered by pack of 50 pieces

## CO2 CONNECTION



Art.-No.	Description
017036L	Flexible hose for high pressure bottle (60bars) US-DIN 477-1, n°6, 1 meter FOR EUROPE
017037L	Flexible hose for high pressure bottle (60bars) US- UNF 7/16" US, 1 meter FOR USA
S_391 000 023	Flexible hose for high pressure bottle (60bars) US- IT (ISO5145), 1 meter FOR ITALY

Art.-No.	Description
-	Central gas supply hoses (Max 7 bars) Contact us for more details

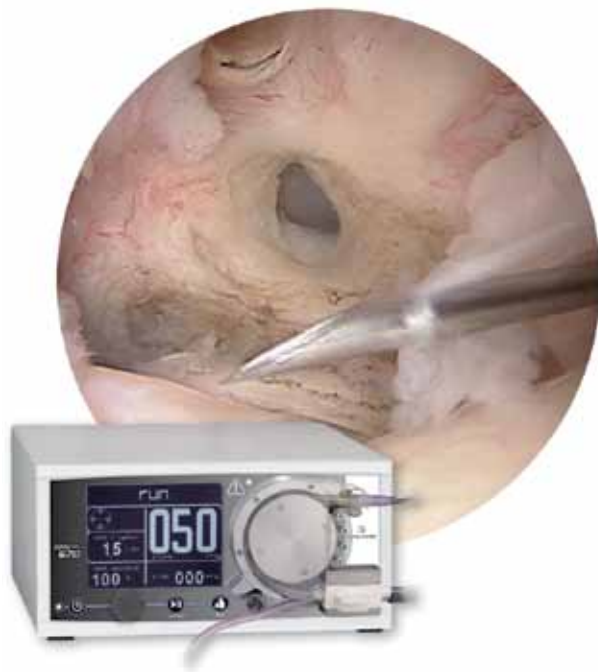
## CO2 BOTTLE CONNECTIONS



Art.-No.	Description
017023	Pin Index connection for DIN 477-1 n°6
017034	Flexible hose for high pressure bottle (60bars) US- IT (ISO5145), 1 meter FOR ITALY







# 5 FLUID MANAGEMENT

SOPRO 670 - Irrigation and suction pump for Arthroscopy .....	p54
SOPRO 672 - Irrigation pump for Gynecology.....	p56
SOPRO 673 - Irrigation and suction pump for Laparoscopy.....	p58

# 5 FLUID MANAGEMENT

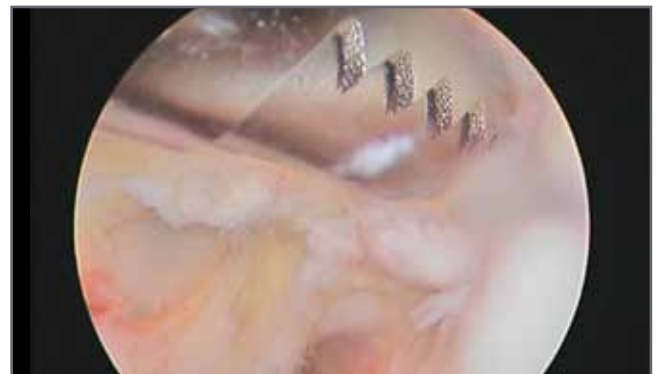
Irrigation and suction pump  
for arthroscopy

SOPRO  
**670**



The perfect fluid management device

- **Irrigation and suction flow management**
- **Quick leakages compensation**
- **Intuitive navigation system with wide LCD interface and thumbwheel**
- **Pneumatic foot remote control**
- **Noiseless**





# 5 FLUID MANAGEMENT

## SPECIFICATIONS

- Maximum pressure (accuracy 5 mmHg): 120 mmHg
- Automatic management of the flow rate
- Irrigation flow management from 0 to 1.5L/mn
- Suction flow management from 0 to 100%
- Compact suction management system
- Noiseless
- Automatic Canula selection
- Flush function with foot remote control
- Quick compensation of leakages
- Automatic overpressure release system
- 5"7 LCD screen
- Browser system and validation by knob
- Visual and sound alarms
- Pneumatic foot pedal
- Dimensions: L=300mm, D=340mm, H=145mm
- Weight: 8 Kg
- Power supply: (100 - 230 VAC ~ / 50 - 60 Hz)
- Power consumption: 80VA
- Protection by fuse: 2 x 2.5 A Temporised fuses - 250V - UR
- Continuous service

## REGULATORY & ENVIRONMENT

- Electrical safety: class 1, BF type
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -40° C / +70° C
- Transport and storage Relative Humidity range: 10 to 100 %
- Operating, Transport and Storage Atmospheric pressure range: 500 hPa to 1,060 hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_670_0001	Irrigation and suction pump for arthroscopy - EU Power Cord
S_670_0002	Irrigation and suction pump for arthroscopy - US Power Cord

## ACCESSORIES



Art.-No.	Description
S_670_003	Sterile single use irrigation / suction tubing set (15 pieces)



Art.-No.	Description
009007	Pneumatic remote control



Art.-No.	Description
700268	Lagoon 250, suction regulator 0 to -200mbar (0 to -150mmHg), maximum flow 20l/min, NF connection, autoclavable 134°C
700269	Bacteriological filters (100 pieces)

# 5 FLUID MANAGEMENT

Irrigation pump  
for gynecology

SOPRO  
**672**



Proven effectiveness

- **Automatic pressure and flow control for optimal view during uterus dilatation**
- **Fluid balance to reduce intravasation risk\***
- **Permanent intra-uterine pressure monitoring**
- **Short learning curve**



\*optional

# 5 FLUID MANAGEMENT

## SPECIFICATIONS

- Pressure range: 15-150 mm Hg
- Flow range: 30-500 ml/min
- High pressure safety: 200 mm Hg
- Power supply: 100-250 V~/50-60Hz
- Max. power consumption: 45 VA
- Max. current consumption: 100 V/60 Hz: 289 mA
- 110 V/60 Hz: 310 mA
- 240 V/50 Hz: 190 mA
- Classifications: Protection Class I, Type BF, IP 41
- Dimensions (w x h x d): 265 x 137 x 390 mm
- Weight: approx. 4 kg

## REGULATORY & ENVIRONMENT

- Electrical safety: class I, BF type
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -40° C / +70° C
- Transport and storage Relative Humidity range: 10 to 100 %
- Operating, Transport and Storage Atmospheric pressure range: 500 hPa to 1,060 hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_672_0001	Irrigation pump for Gynecology - EU power cord

## ACCESSORIES



Art.-No.	Description
700402	Reusable Tube set, 20 uses (10 pcs)
700401L	Sterile Tube set with Luer Lock connection, disposable (10 pcs)
700403L	Sterile Tube set with safe Lock connection, disposable (10 pcs)



Art.-No.	Description
700404L	Tube set for outflow, disposable (10 pcs)

Art.-No.	Description
700405	Bottle scale, (for fluid balance)
700425	Bemis container 3L, (2 pcs)

# 5 FLUID MANAGEMENT

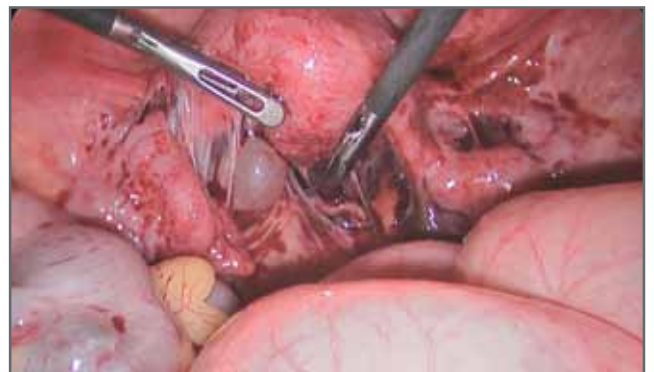
Irrigation and suction pump  
for laparoscopy

SOPRO  
**673**



Simple and accurate

- **Simple and intuitive use**
- **Easy loading of the tubing**
- **High safety through a specific pressure control**
- **Suction for liquid and/or gas included**
- **Noiseless**



# 5 FLUID MANAGEMENT

## SPECIFICATIONS

- Max. flow rate irrigation: 1.8 l/min
- Max flow rate suction: 1.8 l/min
- Max pump capacity: 400 mmHg
- Suction: Between -50 kpa and -60 kpa
- Suction noise level : 57 dB(A)
- Power supply : 100-240V~/50-60Hz
- Main fuse: T 0.5 A – T10 A slow blow, IEC 127/UL recognized
- Max. power consumption: 55 VA
- Max. current: 100V: 500 mA  
115V: 440 mA  
230V: 230 mA
- Safety: Manufactured and tested acc. to EN 60601-1/IEC 60601-1, EMC : EN 60601-1-2 / IEC 60601-1-2
- Dimensions (w x h x d): 280 x 137 x 408 mm
- Weight: approx. 5.9 kgs

## REGULATORY & ENVIRONMENT

- Electrical safety: class 1, BF type
- Comply with the European standard 93/42/EEC - Class IIa
- Comply with the international standards IEC 60601-1; IEC 60601-2-18 ; IEC 60417 and EN 980
- Operating temperature range: +10° C / +40° C
- Operating Relative Humidity range: 30% to 75%
- Transport and storage Temperature range: -40° C / +70° C
- Transport and storage Relative Humidity range: 10 to 100 %
- Operating, Transport and Storage Atmospheric pressure range: 500 hPa to 1,060 hPa
- Not protected against waterfalls (IPX0)
- Not adapted to a use close to a mixture of inflammable anaesthetic with air or oxygen or nitrous oxide.

Art.N°	Description
S_673_0001	Irrigation and suction pump for laparoscopy

## ACCESSORIES



Art.-No.	Description
700401L	Sterile tube set with luer lock connection disposable (10 pcs)
700403L	Sterile tube set with safe lock connection disposable (10 pcs)
700402	Reusable tube set 20 uses

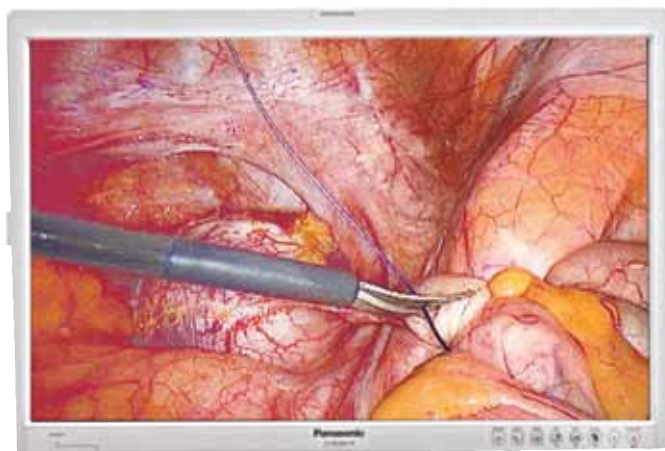


Art.-No.	Description
700421	Tube set suction, reusable 20 uses
700422	Tube set vacuum, reusable 20 uses



Art.-No.	Description
700423L	Hydrophobic filter
700425	Bemis container, (2 pcs)
700424	Coil of wire for Bemis container





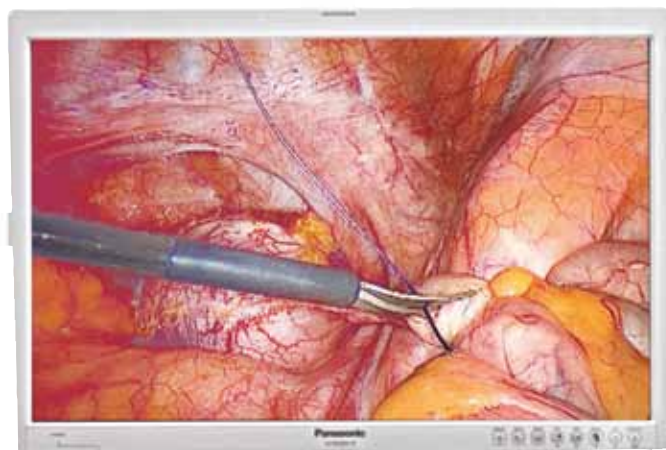
## 6 MONITORS

Operating room . . . . .	p62
PANASONIC® 26" FULL HD medical grade surgical display	
BARCO® 19" HD medical grade surgical display	
Consulting room . . . . .	p64
NEOVO® 22" FULL HD diagnostic display	
Accessories . . . . .	p65



# 6 MONITORS

## OPERATING ROOM



## PANASONIC 26" FULL HD medical grade surgical display

- **Full HD widescreen**
- **High quality colors and accurate image reproduction**
- **Multi HD inputs/outputs**
- **Ergonomic and hygienic design optimized for operating room use**

## SPECIFICATIONS

- Viewing area (diagonal): 26" – TFT AM LCD technology
- Resolution ( H x W): 1920 x 1080
- Luminance: 500 cd/m<sup>2</sup>
- Contrast ratio: 1400:1
- Response speed: 8ms
- Video inputs: 2 x DVI-D, 1 x HD-SDI, 1 x RGB, 1 x S-video, 1 x Comp.
- Video outputs: 1 x DVI-D, 1 x HD-SDI, 1 x RGB, 1 x S-video, 1 x Comp.
- OSD language: English / Spanish / Italian / German / French / Japanese
- Weight: 7.7 kg

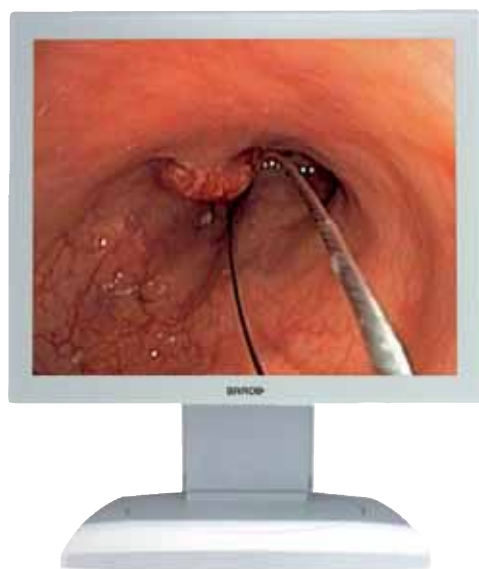
## REGULATORY

- Electrical safety : Class 1
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1-1, 60601-1-2, CCC, FCC-B P CAN/CSA, ICES-001, VCCI Class B

Art.N°	Description
S_700427	Panasonic 26" Full HD medical grade surgical display

# 6 MONITORS

## OPERATING ROOM



## BARCO 19" HD medical grade surgical display

- **High-grade image quality**
- **Optimum viewing comfort**
- **Easy cleaning and disinfection**

## SPECIFICATIONS

- Viewing area (diagonal): 19" – TFT AM LCD technology
- Resolution ( H x W): 1280 x 1024
- Aspect ratio: 5:4
- Luminance: 280 cd/m2
- Contrast ratio: 600:1
- Response speed: 14ms
- Video inputs
- Video outputs
- OSD language: English/Spanish/German/French
- Weight: 8.6 kg

## REGULATORY & ENVIRONMENT

- Electrical safety: Class 1
- Comply with the European standard 93/42/EEC - Class I
- Comply with the international standards IEC 60601-1-1, 60601-1-2, CCC, FCC-B P CAN/CSA, ICES-001, VCCI Class B

Art.N°	Description
S_700056	Barco 19" HD medical grade surgical display

# 6 MONITORS

## CONSULTING ROOM



## NEOVO 22" Full HD diagnostic display

- **Full HD resolution**
- **Eco smart sensor for low power consumption**
- **Built-in speakers**
- **Highly resistant optical glass**

## SPECIFICATIONS

- Panel Type TFT LCD
- Max. Resolution: SXGA 1280 x 1024
- Pixel Pitch: 0.294mm
- Brightness: 250cd/m2 (Typical)
- Contrast Ratio: 600:1 (Typical)
- Viewing Angle: (H/V) 140°/130° (Typical)
- Input Analog: 15-Pin D-Sub
- Digital: 29-Pin DVI-D
- S-Video: 4-Pin Mini Din S-Video
- CVBS: CVBS Jack
- Connector Power: 3-Pin AC Plug
- Thickness: 3.0mm (0.18")
- Reflection Rate: <1%
- Transmission Rate: >96%
- Power: AC 100 – 240V, 50 – 60Hz
- Consumption <48W (On) <4W (Stand-by) <2W (Off)
- Dimensions: (W x H x D) 444 x 419 x 175mm
- Weight: 7.9Kg

## REGULATORY

- Safety & EMI FCC, UL/CUL, EPA,
- TUV/BAURT, CE, TCO 95,
- BSMI, ISO 13406-2, GOST

Art.N°	Description
S_700545	Neovo 22" Full HD diagnostic display

# 6 MONITORS

## ACCESSORIES

Art.-No.	Description
700057	Desktop stand for 19" Barco monitor with VESA mounting

Art.-No.	Description
700311	Protection glass for 19" Barco monitor

Art.-No.	Description
700320	Extension cable for 19" Barco monitor to be used with long arm medical cart

Art.-No.	Description
700376	Extension cable for 26" Panasonic monitor to be used with long arm medical cart

Art.-No.	Description
700577	Protection glass for 26" Panasonic monitor



# **7** **ARGO** **COMMUNICATION SYSTEM**

# 7

## COMMUNICATION SYSTEM

Technology at your fingertips !

*ARGO*





# 7

# COMMUNICATION SYSTEM

## Remote

- **Control all connected device from one unique place**
- **Feedback of essential information from connected devices**

## Imaging

- **Patient and doctor database management**
- **Full HD still images and video recordings**
- **Visualization and edition of recorded/imported media**
- **Reports edition and customization**

## Dicom

- **Data recovery from hospital worklist**
- **Media export/import to or from the PACS**
- **Dicom viewer**

## Streaming

- **Live video and information sharing from the operating room**

## SPECIFICATIONS

- Capacitive 22" MVA LCD touch screen
- Resolution : 1920 x 1080
- Contrast ratio : 3000:1
- Intel Core i7
- 8GB RAM
- 320 GB HDD
- Remote software included to remote control and get feedback from ORION, SIRIUS and VEGA

- Imaging software (option) to record Full HD images and video and manage a patient database
- DICOM software to export data to the PACS
- STREAMING software to send real time information and video on the network.

Art.N°	Description
S_098_0001	ARGO - Intuitive communication system with REMOTE and IMAGING features
S_098_0003	DICOM option for ARGO
S_098_0004	STREAMING option for ARGO





## 8 ARCHIVING SYSTEMS

USB medical recorders .....	p72
DVD medical recorder .....	p73

# 8 ARCHIVING SYSTEMS

## Medical recorders



## USB medical recorders



- **Intuitive use**
- **Medical grade**

### USB 200

Records videos and still images from standard medical video sources to a USB flash drive or a USB hard disk

### USB 300

Records high definition videos and still images from medical video sources to internal hard drive, external USB drive or network drive

## SPECIFICATIONS

- LCD monitor: 2.5" , color ( for video confirmation only)
- Buttons: Sealed membrane, fluid resistant
- Video inputs: 1 x S-video, 1 x Comp
- Video outputs: 1 x S-video, 1 x Comp
- Video In/Out: PAL or NTSC formats
- Audio In/Out: Standard 3.5mm stereo phone jacks
- Footswitch: Hands-free capture - standard 3.5mm minijack
- Image formats: JPEG, TIFF, PNG, DICOM (upgrade required)
- Images sizes: 1024 x 768 ; 800 x 600 ; 640 x 480 pixels
- Video formats: MPEG2 ( DVD quality)
- Medias: USB flash drives or external USB hard drive
- Dimensions: 240 x 200 x 63mm
- Weight: 1.7kg

- LCD monitor: 2.5" , full color ( for video confirmation only)
- Buttons: Sealed membrane, fluid resistant
- Video inputs: DVI, RGB (via adapter), HD-SDI, S-video, Comp
- Video outputs: DVI, RGB (via adapter)
- Footswitch: Hands-free capture – standard 3.5mm minijack
- Image formats: JPEG, TIFF, BMP, DICOM
- Networking: RJ4510 / 100 / 1000 Ethernet
- Internal storage: USB flash drive, USB hard drive, network drive
- Video formats: H.264 / MPEG ( 1080, 720, NTSC, PAL)
- Dimensions: 240 x 211 x 63mm
- Weight: 1.8kg

## REGULATORY

- CE 93/42/EEC
- UL 60601-1, IEC 60601-1, IEC 60601-1-2
- CSA C22.2 No.601.1, E 306417

- FCC Part 15, FDA Class 1, RoHS, PSE

Art.N°	Description
S_700091	M-USB200 for video and still images
009002	Foot remote control

Art.N°	Description
S_700211	M-USB 300 for full HD video and still images
009002	Foot remote control

# 8 ARCHIVING SYSTEMS

## Medical recorder



## Medical grade DVD recorder

- **User friendly recorder**

### SPECIFICATIONS

- Recording System: DVD Recording, NTSC/PAL Switchable
- Recording Format: Video: MPEG-2 compression
- Audio: Dolby Digital format
- Recordable Media: DVD+RW (2.4x and 4x speed)
- Recording Time: HQ Mode: 60 minutes
- Composite Input: BNC x2
- S-Video Input: 4-pin DIN x2, with loop-through
- Y/C input
- S-Video Output: 4-pin DIN x1
- Y/C output
- Remote Control: RS-232C x1, D-sub 9-pin
- Dimensions: 212 x 128.5 x 382 mm
- Weight: 6 kg
- Power supply: (110-230 VAC~; 50 -60Hz)
- Power Consumption: 35 W

### REGULATORY & ENVIRONMENT

- Medical Standards: EN60601-1, EN60601-1-2, UL60601-1, CSA C22.2 No.60601.1

Art.N°	Description
S_700077	Medical DVD recorder



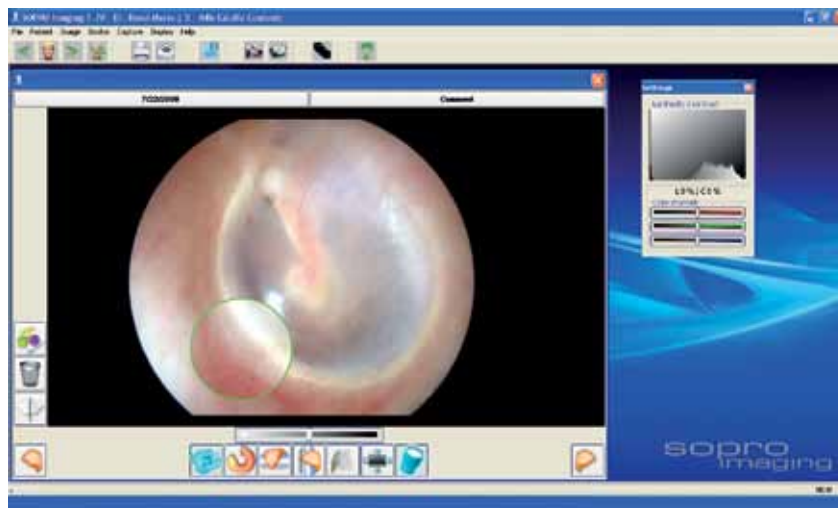
# 9 IMAGING SOFTWARE



# 9 IMAGING SOFTWARE

Medical Imaging software

SOPRO  
imaging



A powerful software

- **A unique communication tool**
- **Dedicated to diagnosis aid and patient management**
- **Multi-languages format**
- **Sleek new design en enhanced ergonomics**

## RECOMMENDED COMPUTER CONFIGURATION

### Windows® minimum configuration required

- Operating system: Windows XP Pro SP3
- Processor: Intel® Pentium IV – 1.3GHz
- RAM: 512MB
- Hard disk: 250GB
- USB ports: 2 USB2 Hi-Speed ports
- Graphic card: 32MB RAM unshared memory compatible DirectX 9
- USB Chipset: Intel® or NEC® / RENESAS®
- Screen resolution: 1024 x 768

### Windows® recommended configuration

- Operating system: Windows 7 Pro SP1
- Processor: Intel Core 2
- RAM: 2GB
- Hard disk: 1TB
- USB ports: 4 USB2 Hi-Speed ports
- Graphic card: Chipset Nvidia® or ATI®
- 512MB unshared memory compatible DirectX 9
- USB Chipset: Intel or NEC / RENESAS
- Screen resolution: 1280 x 1024 or more

## SOPRO IMAGING MEDICAL SOFTWARE

- Patient management
- Image and video recording and editing
- Image annotation and drawings
- Zoom
- Medical reports (Word, Pdf)
- Export your images and videos to DVD, USB, mail, ...
- Only once license required when connected to the network

Art.N°	Description
505026	Sopro Imaging Medical license
990145	CD-ROM: Sopro Imaging medical software







# 10 MEDICAL CARTS

Operating room . . . . .	p80
Premium carts	
Basic carts	
Accessories . . . . .	p82
Consulting room . . . . .	p84

# 10 MEDICAL CARTS

## OPERATING ROOM

### Premium carts



#### Premium & short arm

- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x long arm on central pivot
- 1x Short arm on central pivot
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

Art.N°	Description
700598	Premium cart with long and short arms
700624	Premium cart with long and short arms + transformer



#### Premium

- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x Long arm on central pivot
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

Art.N°	Description
700597	Premium cart with long arm
700625	Premium cart with long arm + transformer

# 10 MEDICAL CARTS

## OPERATING ROOM

### Basic carts



#### Basic & short arm

- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1 x articulated short arm
- 1x Fixed mount for flat panel
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

Art.N°	Description
700596	Basic cart with fixed screen and short arm
700627	Basic cart with fixed screen and short arm + transformer



#### Basic

- 1x Fixed shelf
- 1x Adjustable shelf
- 1x Drawer
- 1x Fixed mount for flat panel
- 1x 5m Careflex Power Cord
- 7x 60cm connection power cables

Art.N°	Description
700595	Basic cart with fixed screen
700628	Basic cart with fixed screen + transformer

# 10 MEDICAL CARTS

## ACCESSORIES



Art.-No.	Description
700359	Pull out shelf for keyboard



Art.-No.	Description
700621	Camera holder (stainless steel)



Art.-No.	Description
700622	Cable hook (stainless steel)



Art.-No.	Description
700619	Bottle holder 140mm (rear side cart)



Art.-No.	Description
700317	Shelf (320x450)



# 10 MEDICAL CARTS

## ACCESSORIES



Art.-No.	Description
700361	Foot switch panel for undercarriage



Art.-No.	Description
700618	Flexible scope holder



Art.-No.	Description
700617	Serum holder



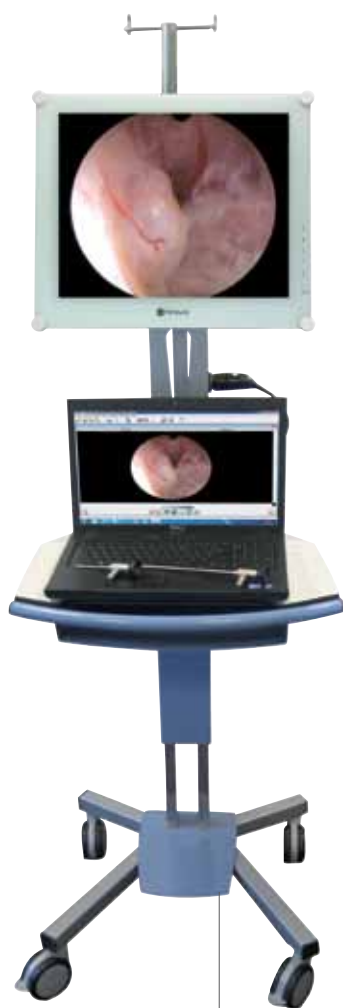
Art.-No.	Description
700309	Power cord C13-C14 (60cm)

Art.-No.	Description
700616	EQP connection lead 60cm

# 10 MEDICAL CARTS

## CONSULTING ROOM

### Ubicart



#### Ubicart

- 1 x 4 way Power strip
- 1 x Serum holder
- 1 x Camera holder
- 1 x Light cable holder
- 1 x Isolation transformer (option)

Art.N°	Description
700362	UBICART including power strip, serum, camera and light cable holders.
700418	UBICART including power strip, serum, camera, light cable holders and isolation transformer
707039	Extra shelf (450 x 320 mm) for UBICART









SOPRO COMEG

## EVERYWHERE

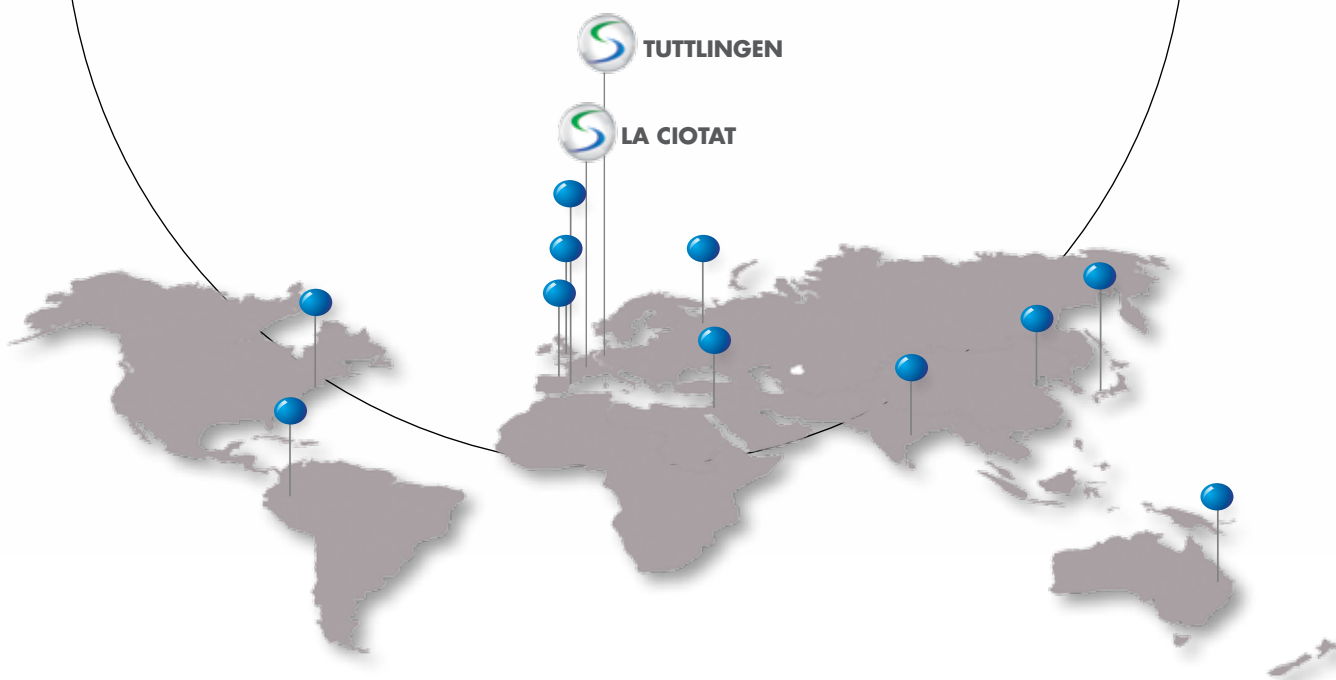
Worldwide centres to ease  
and fasten the service  
of our complete product line

## ALWAYS

Dedicated to  
medical improvement  
for more than 40 years

## AT YOUR SIDE

Direct and quick communication  
with our local sales force.  
National placed inventory  
to ensure quick delivery time



**SOPRO SA** - ZAC Athélia IV - Avenue des Génévriers  
13705 La Ciotat cedex - France

Tél. +33 (0) 442 98 01 01 - Fax +33 (0) 442 71 76 90

**SOPRO-COMEG GmbH** - Dornierstr. 55  
D-78532 Tuttlingen - Germany

Tel. +49 (0) 7661-9344-0 - Fax +49 (0) 7461-9344-21

[www.sopro-comeg.com](http://www.sopro-comeg.com)